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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/827,170	04/06/2001	Shuhei Iizuka	108340	4382

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EXAMINER

KNABLE, GEOFFREY L

ART UNIT	PAPER NUMBER
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1733

DATE MAILED: 03/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/827,170

Applicant(s)

IIZUKA, SHUHEI

Examiner

Geoffrey L. Knable

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 January 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 11,12,14,16-18,20 and 22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 11,12,14,16-18,20 and 22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

G.B

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on November 8, 2004 has been entered.
2. Claims 14 and 20 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claims 14 and 20 define the extruder is a positive displacement extruder whereas independent claims 11 and 17, from which these claims depend, require that short fibers in the ribbon be randomly arranged. An examination of the original disclosure however seems to only show original description of the invention as contemplating the use of a positive displacement extruder when the fibers are desired to be circumferentially oriented while the screw type extruder is used when it is desired that the fibers be relatively randomly arranged (note esp. paragraph [0032]). It thus is not considered that the original disclosure was describing use of a positive displacement extruder for forming any but oriented fibers and as such, these claims are considered to define the invention in a manner that was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that

the inventor(s), at the time the application was filed, had possession of the claimed invention, i.e. it is considered to be new matter.

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

4. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over JP 10-109506 to Sumitomo Rubber taken in view of GB 2134439 to Holroyd et al., JP 11-105155 to Bridgestone (newly cited) and Kanenari et al. (US 6,209,603 – newly cited).

JP '506 and GB '439 are applied for substantially the same reasons set forth in the last office action. JP '155 has been applied as additional evidence that the artisan desiring to preform an annular tire component for application in the side areas of a tire would have found it obvious to extrude onto a carrier rotatable about a vertical axis. In particular, this reference, like GB '439, is also directed to preforming tire components for the side areas of a tire by spiral winding and suggests that the carrier be horizontal and rotated about a vertical axis with an extruder whose nozzle moves radially. Guided by these teachings, it is considered that the ordinary artisan would have found it to have been obvious to preform the JP '506 reinforcing layer using a carrier/nozzle arrangement as claimed.

As to the orientation of the fibers, JP '506 describes advantages for adopting oriented short fibers (at 0-30 degrees; see paragraphs 19-22) although the reference does seem to indicate an appreciation that not all the fibers may be oriented as desired (note paragraph 28 indicating that up to 10% of the fibers may not be oriented as desired). This would thus arguably be inclusive of reinforcing layers that include some

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randomly oriented fibers – i.e. the claims do not clearly exclude the presence of only some randomly oriented fibers. In any event, note further, Kanenari et al., which is also directed to tires having at least part of the sidewall of a tire reinforced with short fibers, suggests that the short fibers may be oriented e.g. circumferentially or may be arranged at random (note esp. col. 6, lines 23-32 and fig. 8), maximum reinforcing occurring when oriented. Thus, it is considered that the artisan would have found it obvious to utilize random fibers if the general rubber reinforcing effect of the fibers were desired without the additional advantages of the orientation. In other words, although the art would indicate that random fibers are not preferred, applicant has not provided any indication that the use of random fibers provides any but the expected results, it being noted in fact that the present specification seems to also prefer oriented fibers – thus, again, it is submitted that use of random fibers would have been obvious albeit not preferred, such however producing only the expected results.

5. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over JP 10-109506 to Sumitomo Rubber taken in view of GB 2134439 to Holroyd et al., JP 11-105155 to Bridgestone and Kanenari et al. (US 6,209,603) as applied to claim 11 above, and further in view of JP 10-315717

These references are applied for the same reasons set forth in the last office action. Additionally, it is noted that JP '155 further would have rendered it obvious to also form the filler on the carrier for the reasons cited therein (avoidance of splice, etc.).

6. Claims 14 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 10-109506 to Sumitomo Rubber taken in view of GB 2134439 to Holroyd et al.,

JP 11-105155 to Bridgestone and Kanenari et al. (US 6,209,603) as applied above, and further in view of Laurent (US 4,963,207) and/or EP 968814 to Bridgestone as applied in the last office action.

7. Claims 17, 18, 20 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 10-109506 to Sumitomo Rubber taken in view of Kanenari et al. (US 6,209,603 – newly cited) and [Laurent (US 4,963,207) and/or EP 968814 to Bridgestone].

JP '506, Laurent and EP '814 are applied for the same reasons as set forth in the last office action.

As to the orientation of the fibers, JP '506 describes advantages for adopting oriented short fibers (at 0-30 degrees; see paragraphs 19-22) although the reference does seem to indicate an appreciation that not all the fibers may be oriented as desired (note paragraph 28 indicating that up to 10% of the fibers may not be oriented as desired). This would thus arguably be inclusive of reinforcing layers that include some randomly oriented fibers – i.e. the claims do not clearly exclude the presence of only some randomly oriented fibers. In any event, note further, Kanenari et al., which is also directed to tires having at least part of the sidewall of a tire reinforced with short fibers, suggests that the short fibers may be oriented e.g. circumferentially or may be arranged at random (note esp. col. 6, lines 23-32 and fig. 8), maximum reinforcing occurring when oriented. Thus, it is considered that the artisan would have found it obvious to utilize random fibers if the general rubber reinforcing effect of the fibers were desired without the additional advantages of the orientation. In other words, although the art would

indicate that random fibers are not preferred, applicant has not provided any indication that the use of random fibers provides any but the expected results, it being noted in fact that the present specification seems to also prefer oriented fibers – thus, again, it is submitted that use of random fibers would have been obvious albeit not preferred, such however producing only the expected results.

8. Applicant's arguments filed 11-8-2004 have been fully considered but they are not persuasive and are mostly moot in view of the above new rejections.

The prior 35 USC 112 rejections have however been withdrawn in light of the amendments. Note however the new 112 rejection above. The remaining arguments are in most cases moot in view of the new grounds of rejection applied above.


Additionally, although it is argued that the JP '506 reference would not suggest overlapping ribbon edges, apparently in light of the fig. 2 depiction in JP '506, note again paragraph [0039] of the machine translation that is considered to suggest that "lap winding" may be carried out, this being considered to suggest overlapping edges as claimed.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Geoffrey L. Knable whose telephone number is 571-272-1220. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Blaine Copenheaver can be reached on 571-272-1156. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Geoffrey L. Knable
Primary Examiner
Art Unit 1733

G. Knable
March 8, 2005